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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,429	08/04/2003	Ramanuj Goswami	86680CPK	8313

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Paul A. Leipold
Patent Legal Staff
Eastman Kodak Company
343 State Street
Rochester, NY 14650-2201

EXAMINER

CHEA, THORL

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,429

Applicant(s)

GOSWAMI ET AL.

Examiner

Thorl Chea

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 08042003.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 8, 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of the term "preferably" renders the claimed unclear as to whether it was intended the non-preferred range; and there is antecedent basis for "antihaltion dye" in claim 26, line 10.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-12, 14-22 are e rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0308750 (EP'750) in view of C. Hansch and A.J. Leo, in "Substituent constants for Correlation Analysis in Chemistry and Biology", Wiley, New York, 1979 (Leo).

EP'750 discloses a composition comprising a base precursor that is a salt an organic base with an arylsulfonylacetic in association with a compound, which is useful in photography, and a heat developable substantially as claimed. See the compound in column 8, compound (III-1), compounds 1-40, in column 11-18; the additives known to be used in the photographic material such as reducing agent, color forming substance, binder initiator, hot melt solvent, antifoggant,

development accelerator, dye or pigment for the purpose of anti-halation or anti-irradiation; the binder used in combination with the base precursor include hydrophilic polymer with an amount of 0.5 to 400 % based on the amount precursor. See also the additive in the document as a whole, especially pages 46-49, claims 1-20; page 26, lines 1-5; page 28, page 31-32. The difference between EP'750 and that of the present claimed invention is the substituent $-(C=O)-O-R^1$ associated with the phenyl group. In column 8, compound (III-1), EP'750 discloses that Y is a monovalent including preferred aryl group and can be substituted with monovalent substituent such as halogen, an alkyl group, an alkylsulfonyl group, an arylsulfonyl group, an acylamino group and sulfamoyl (column 8, lines 59-61). Leo discloses substituent constants for correlation analysis in chemistry and biology. See for instance the substituent on page 50 such as $-SO_2C_2H_5$ and $-CO_2H_5$. Both of the substituent shares a common constant number. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to substitute a known equivalent substituent or a monovalent substituent known in the art such as Leo in the base precursor compound taught in EP'750 with a reasonable expectation of success. The language such as "capable of bleaching the filter dye" or "capable of promoting the unblocking compound" in claims 3, 4 is functional, and the base precursor that is a salt an organic base with an arylsulfonylacetic taught in EP'750 is capable of performing such function because of the similarity of the functional group. Moreover, A prima facie case of obviousness may be made when chemical compounds have very close structural similarity and similar utilities. Also "an obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties." In re Payne, 606 F.2d 303, 313,

203 USPQ 245, 254 (CCPA 1979). See *In re Papesch*, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) (discussed in more detail below) and *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991).

5. Claims 3, 11, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0308750 (EP'750) in view of C. Hansch and A.J. Leo, in "Substituent constants for Correlation Analysis in Chemistry and Biology", Wiley, New York, 1979 (Leo) as applied to claims 1-12, 14-22 above, and further in view of Helland et al (US Patent No. 5,314,795). Helland et al in the abstract and column 27 claims 1 discloses the use of an arylsulfonyl acetic acid in association with filter useful in a photographic material, thermographic material and photothermographic material. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to produce a thermal bleachable dye using a filter dye in association with the an arylsulfonyl acetic acid obtained by the combination EP'750 and Leo with an reasonable expectation of success, and thereby provide an invention as claimed.

6. Claims 1, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai et al (105:235983).

See STIC Search Report on page 7, L4 to page 8; especially the arylsulfonyl acetic acid on page 8, which useful as base precursor for thermal recording and photothermographic material. This compound differs from that claimed in the present claimed invention in that it contains to – (C=O)-OMe, wherein the compound claimed in the present claimed invention contains a single – (C=O)-OMe group. However, both compounds contain same functional group and has similar utility. It would have obvious to the worker of ordinary skill in the art at the time the invention was made to use one or more similar group with a reasonable expectation of success. "A prima

facie case of obviousness may be made when chemical compounds have very close structural similarity and similar utilities. "An obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties." In re Payne, 606 F.2d 303, 313, 203 USPQ 245, 254 (CCPA 1979). See In re Papesch, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) (discussed in more detail below) and In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991)."

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/634,429
Art Unit: 1752

Page 6

Tchea *tlm*
November 17, 2004

Thorl Chea
Primary Examiner
Art Unit 1752

Thorl Chea